

| <b>CLAIMS ONLY</b> |          |      |                        |      |                        |      | SERIAL NO.   | FILING DATE |
|--------------------|----------|------|------------------------|------|------------------------|------|--------------|-------------|
|                    |          |      |                        |      |                        |      | APPLICANT(S) |             |
| CLAIMS             |          |      |                        |      |                        |      |              |             |
|                    | AS FILED |      | AFTER<br>1st AMENDMENT |      | AFTER<br>2nd AMENDMENT |      |              |             |
|                    | IND.     | DEP. | IND.                   | DEP. | IND.                   | DEP. |              |             |
| 1                  | /        |      |                        |      |                        |      | 51           |             |
| 2                  |          |      |                        |      |                        |      | 52           |             |
| 3                  |          |      |                        |      |                        |      | 53           |             |
| 4                  |          |      |                        |      |                        |      | 54           |             |
| 5                  | /        |      |                        |      |                        |      | 55           |             |
| 6                  | /        |      |                        |      |                        |      | 56           |             |
| 7                  |          |      |                        |      |                        |      | 57           |             |
| 8                  | /        |      |                        |      |                        |      | 58           |             |
| 9                  |          |      |                        |      |                        |      | 59           |             |
| 10                 |          |      |                        |      |                        |      | 60           |             |
| 11                 | /        |      |                        |      |                        |      | 61           |             |
| 12                 |          |      |                        |      |                        |      | 62           |             |
| 13                 |          |      |                        |      |                        |      | 63           |             |
| 14                 |          |      |                        |      |                        |      | 64           |             |
| 15                 |          |      |                        |      |                        |      | 65           |             |
| 16                 |          |      |                        |      |                        |      | 66           |             |
| 17                 |          |      |                        |      |                        |      | 67           |             |
| 18                 |          |      |                        |      |                        |      | 68           |             |
| 19                 |          |      |                        |      |                        |      | 69           |             |
| 20                 |          |      |                        |      |                        |      | 70           |             |
| 21                 |          |      |                        |      |                        |      | 71           |             |
| 22                 | /        |      |                        |      |                        |      | 72           |             |
| 23                 |          |      |                        |      |                        |      | 73           |             |
| 24                 |          |      |                        |      |                        |      | 74           |             |
| 25                 | /        |      |                        |      |                        |      | 75           |             |
| 26                 |          |      |                        |      |                        |      | 76           |             |
| 27                 |          |      |                        |      |                        |      | 77           |             |
| 28                 |          |      |                        |      |                        |      | 78           |             |
| 29                 | /        |      |                        |      |                        |      | 79           |             |
| 30                 |          |      |                        |      |                        |      | 80           |             |
| 31                 |          |      |                        |      |                        |      | 81           |             |
| 32                 | /        |      |                        |      |                        |      | 82           |             |
| 33                 |          |      |                        |      |                        |      | 83           |             |
| 34                 |          |      |                        |      |                        |      | 84           |             |
| 35                 |          |      |                        |      |                        |      | 85           |             |
| 36                 |          |      |                        |      |                        |      | 86           |             |
| 37                 |          |      |                        |      |                        |      | 87           |             |
| 38                 |          |      |                        |      |                        |      | 88           |             |
| 39                 |          |      |                        |      |                        |      | 89           |             |
| 40                 |          |      |                        |      |                        |      | 90           |             |
| 41                 |          |      |                        |      |                        |      | 91           |             |
| 42                 |          |      |                        |      |                        |      | 92           |             |
| 43                 | /        |      |                        |      |                        |      | 93           |             |
| 44                 |          |      |                        |      |                        |      | 94           |             |
| 45                 |          |      |                        |      |                        |      | 95           |             |
| 46                 | /        |      |                        |      |                        |      | 96           |             |
| 47                 |          |      |                        |      |                        |      | 97           |             |
| 48                 |          |      |                        |      |                        |      | 98           |             |
| 49                 |          |      |                        |      |                        |      | 99           |             |
| 50                 | /        |      |                        |      |                        |      | 100          |             |
| TOTAL IND.         |          | ↓    |                        | ↓    |                        | ↓    | TOTAL IND.   | ↓           |
| TOTAL DEP.         |          | ←    |                        | ←    |                        | ←    | TOTAL DEP.   | ←           |
| TOTAL CLAIMS       |          |      |                        |      |                        |      | TOTAL CLAIMS |             |

\* MAY BE USED FOR ADDITIONAL CLAIMS OR ADMENDMENTS

FORM PTO-2022 (1-98)

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

| <b>CLAIMS ONLY</b> |          |      |                        |      |                        |      | SERIAL NO.   | FILING DATE |
|--------------------|----------|------|------------------------|------|------------------------|------|--------------|-------------|
|                    |          |      |                        |      |                        |      | APPLICANT(S) |             |
| <b>CLAIMS</b>      |          |      |                        |      |                        |      |              |             |
|                    | AS FILED |      | AFTER<br>1st AMENDMENT |      | AFTER<br>2nd AMENDMENT |      |              |             |
|                    | IND.     | DEP. | IND.                   | DEP. | IND.                   | DEP. |              |             |
| 101                | 1        |      |                        |      |                        |      |              |             |
| 2                  |          |      |                        |      |                        |      |              |             |
| 3                  |          |      |                        |      |                        |      |              |             |
| 4                  |          |      |                        |      |                        |      |              |             |
| 5                  |          |      |                        |      |                        |      |              |             |
| 6                  |          |      |                        |      |                        |      |              |             |
| 7                  |          |      |                        |      |                        |      |              |             |
| 8                  |          |      |                        |      |                        |      |              |             |
| 9                  |          |      |                        |      |                        |      |              |             |
| 10                 |          |      |                        |      |                        |      |              |             |
| 11                 |          |      |                        |      |                        |      |              |             |
| 12                 |          |      |                        |      |                        |      |              |             |
| 13                 |          |      |                        |      |                        |      |              |             |
| 14                 |          |      |                        |      |                        |      |              |             |
| 15                 |          |      |                        |      |                        |      |              |             |
| 16                 |          |      |                        |      |                        |      |              |             |
| 17                 | 1        |      |                        |      |                        |      |              |             |
| 18                 |          |      |                        |      |                        |      |              |             |
| 19                 |          |      |                        |      |                        |      |              |             |
| 20                 |          |      |                        |      |                        |      |              |             |
| 21                 |          |      |                        |      |                        |      |              |             |
| 22                 |          |      |                        |      |                        |      |              |             |
| 23                 |          |      |                        |      |                        |      |              |             |
| 24                 |          |      |                        |      |                        |      |              |             |
| 25                 |          |      |                        |      |                        |      |              |             |
| 26                 |          |      |                        |      |                        |      |              |             |
| 27                 |          |      |                        |      |                        |      |              |             |
| 28                 |          |      |                        |      |                        |      |              |             |
| 29                 |          |      |                        |      |                        |      |              |             |
| 30                 |          |      |                        |      |                        |      |              |             |
| 31                 |          |      |                        |      |                        |      |              |             |
| 32                 |          |      |                        |      |                        |      |              |             |
| 33                 |          |      |                        |      |                        |      |              |             |
| 34                 |          |      |                        |      |                        |      |              |             |
| 35                 |          |      |                        |      |                        |      |              |             |
| 36                 |          |      |                        |      |                        |      |              |             |
| 37                 |          |      |                        |      |                        |      |              |             |
| 38                 |          |      |                        |      |                        |      |              |             |
| 39                 |          |      |                        |      |                        |      |              |             |
| 40                 |          |      |                        |      |                        |      |              |             |
| 41                 |          |      |                        |      |                        |      |              |             |
| 42                 |          |      |                        |      |                        |      |              |             |
| 43                 |          |      |                        |      |                        |      |              |             |
| 44                 |          |      |                        |      |                        |      |              |             |
| 45                 |          |      |                        |      |                        |      |              |             |
| 46                 |          |      |                        |      |                        |      |              |             |
| 47                 |          |      |                        |      |                        |      |              |             |
| 48                 |          |      |                        |      |                        |      |              |             |
| 49                 |          |      |                        |      |                        |      |              |             |
| 50                 |          |      |                        |      |                        |      |              |             |
| TOTAL IND.         |          | ↓    |                        | ↓    |                        | ↓    |              |             |
| TOTAL DEP.         |          | ←    |                        | ←    |                        | ←    |              |             |
| TOTAL CLAIMS       |          |      |                        |      |                        |      |              |             |
| 51                 |          |      |                        |      |                        |      |              |             |
| 52                 |          |      |                        |      |                        |      |              |             |
| 53                 |          |      |                        |      |                        |      |              |             |
| 54                 |          |      |                        |      |                        |      |              |             |
| 55                 |          |      |                        |      |                        |      |              |             |
| 56                 |          |      |                        |      |                        |      |              |             |
| 57                 |          |      |                        |      |                        |      |              |             |
| 58                 |          |      |                        |      |                        |      |              |             |
| 59                 |          |      |                        |      |                        |      |              |             |
| 60                 |          |      |                        |      |                        |      |              |             |
| 61                 |          |      |                        |      |                        |      |              |             |
| 62                 |          |      |                        |      |                        |      |              |             |
| 63                 |          |      |                        |      |                        |      |              |             |
| 64                 |          |      |                        |      |                        |      |              |             |
| 65                 |          |      |                        |      |                        |      |              |             |
| 66                 |          |      |                        |      |                        |      |              |             |
| 67                 |          |      |                        |      |                        |      |              |             |
| 68                 |          |      |                        |      |                        |      |              |             |
| 69                 |          |      |                        |      |                        |      |              |             |
| 70                 |          |      |                        |      |                        |      |              |             |
| 71                 |          |      |                        |      |                        |      |              |             |
| 72                 |          |      |                        |      |                        |      |              |             |
| 73                 |          |      |                        |      |                        |      |              |             |
| 74                 |          |      |                        |      |                        |      |              |             |
| 75                 |          |      |                        |      |                        |      |              |             |
| 76                 |          |      |                        |      |                        |      |              |             |
| 77                 |          |      |                        |      |                        |      |              |             |
| 78                 |          |      |                        |      |                        |      |              |             |
| 79                 | 1        |      |                        |      |                        |      |              |             |
| 80                 |          |      |                        |      |                        |      |              |             |
| 81                 | 1        |      |                        |      |                        |      |              |             |
| 82                 | 1        |      |                        |      |                        |      |              |             |
| 83                 |          |      |                        |      |                        |      |              |             |
| 84                 |          |      |                        |      |                        |      |              |             |
| 85                 |          |      |                        |      |                        |      |              |             |
| 86                 | 1        |      |                        |      |                        |      |              |             |
| 87                 |          |      |                        |      |                        |      |              |             |
| 88                 |          |      |                        |      |                        |      |              |             |
| 89                 |          |      |                        |      |                        |      |              |             |
| 90                 |          |      |                        |      |                        |      |              |             |
| 91                 |          |      |                        |      |                        |      |              |             |
| 92                 |          |      |                        |      |                        |      |              |             |
| 93                 |          |      |                        |      |                        |      |              |             |
| 94                 |          |      |                        |      |                        |      |              |             |
| 95                 |          |      |                        |      |                        |      |              |             |
| 96                 |          |      |                        |      |                        |      |              |             |
| 97                 |          |      |                        |      |                        |      |              |             |
| 98                 |          |      |                        |      |                        |      |              |             |
| 99                 |          |      |                        |      |                        |      |              |             |
| 100                |          |      |                        |      |                        |      |              |             |
| TOTAL IND.         | 18       | ↓    |                        | ↓    |                        | ↓    |              |             |
| TOTAL DEP.         | 168      | ←    |                        | ←    |                        | ←    |              |             |
| TOTAL CLAIMS       | 186      |      |                        |      |                        |      |              |             |

\* MAY BE USED FOR ADDITIONAL CLAIMS OR ADMENDMENTS

[illegible]